

REMARKS

The Office Action mailed September 10, 2003, has been carefully reviewed. The claims as amended herein are fully supported by the application as originally filed. No new matter has been added. Reconsideration and allowance of the present application is respectfully requested in view of the foregoing amendments and the following additional remarks.

Rejections Under 35 U.S.C. § 102

Claims 16, 22-24 and 31-33 are rejected under 35 U.S.C. §102(b) as allegedly being anticipated by Falls (US 3,616,098). The Examiner asserts that Falls' etching composition contains ammonium bifluoride, hydrofluoric acid, potassium fluoride, diethylene glycol and water. As amended, claim 16 now teaches a glass etching composition consisting essentially of a composition that clearly excludes hydrofluoric acid. Anticipation under Section 102 can be found only if a reference shows exactly what is claimed. *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985). Thus amended claim 16 is not anticipated by Falls and the rejection under 35 U.S.C. §102(b). Withdrawal of this ground for rejection is respectfully requested.

Further, claims 22 – 24 are canceled and the rejection is now moot as to these claims. Moreover, amended claims 31-33 now depend from amended claim 16 which is not anticipated by Falls. The Examiner is respectfully requested to withdraw this ground for rejecting claims 31-33.

Claims 16, 22-24 and 33 are rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Brink (US 4,897,213). The Examiner asserts that Brink's composition having 11.2% ammonium bifluoride; 18.7% denatured alcohol or ethanol; and 70.1% water is identical to the Applicant's invention. Applicant respectfully disagrees.

Brink's 11.2% ammonium fluoride is outside the range of fluoride (1 to 10% w/v %) claimed by claim 16. Moreover, Brink's 18.7% denatured alcohol is also outside the range of 20-80% v/v of water-miscible organic solvent taught by amended claim 16. Again since Brink does not show exactly what is claimed by claim 16, anticipation does not lie and the withdrawal of this ground for rejection is respectfully requested. Further, claims 22-24 are now canceled and their rejection is moot. Moreover, claim 31 depends from amended claim 16, which, as explained above, is not anticipated by Brink.

In response to Applicant's argument that Brink nonanalogously refers to the cleaning of granite surfaces, the Examiner held that Brink is a reasonably pertinent art and further asserts that "the cleaning agents of Brink would inherently etch glass as well as granite." Applicant disagrees with the Examiner's characterization of Brink as a granite/glass etching composition whereas Brink particularly points out that his invention is a cleaning agent for use in "removing weathering,

microorganisms and dirt from granite monuments, memorials, buildings and other granite products.” Brink Column 1, lines 40 – 43. Brink’s cleaning composition is expressly not designed to etch the object to be cleaned or it would destroy the utility of Brink’s invention.

Rejections Under 35 U.S.C. § 103(a)

Claims 17, 18, 21, 27-30 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Falls in view of Gimm et al. (US 5,281,350). The Examiner asserts that Falls does not teach the addition of a gelling agent or sucrose and that Gimm et al. teach using sugar (sucrose) as a gelling agent because the flow modifier acts as a gelling agent. Applicant disagrees that the deficiencies in Falls are adequately cured by Gimm et al. to where their combination makes the present invention obvious.

As mentioned above, Falls teaches the use of hydrofluoric acid whereas amended claim 17 clearly excludes hydrofluoric acid. Because hydrofluoric acid is so hazardous and toxic to the body of the person handling the etching composition, the non-use of hydrofluoric acid is indeed one of the objects of the present invention.

As for Gimm et al. curing Falls’ deficiency with respect to a gelling agent, Applicant disagrees with the Examiner that a mere flow modifier is the functional equivalent of a gelling agent. Whereas a flow modifier could affect the viscosity of the etching composition, a gelling agent is capable of transforming the etching composition into a semi-solid consistency. In fact, one of skill in the art would expect sucrose or sugar alcohols to be soluble in the glycerin (glycerol) component of Gimm’s composition to where sucrose can only affect the viscosity of the etching composition but lack the ability to transform such a solution to a semi-solid consistency.

Assuming for the sake of argument that Gimm’s flow modifiers such as sugar, starch syrup, grain syrup, honey and the like (Gimm et al. column 3, line 1-2) could act as gelling agents in an alcoholic solvent base, amended claim 17’s gelling agents categorically exclude the Gimm et al.’s modifiers. Furthermore, Gimm et al. require the use of ferric chloride in their etching composition ostensibly to enhance the activity of the ammonium bifluoride. The present invention does not contain that additional restriction.

Additionally, Applicant asserts that Grimm et al. and Falls are not properly combinable. To be properly combined, "the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. "In re Vaeck, 947 F.2d 488, 20 U.S.P.Q. 2d 1438 (Fed. Cir. 1991)." The mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also

suggests the desirability of the combination." In re Mills, 916 F.2d 680, 16 U.S.P.Q. 2d 1430 (Fed. Cir. 1990). Notwithstanding these requirements, the Examiner has failed to point to anything in the prior art that would suggest the combination it now asserts to be obvious. Moreover, no such motivation or suggestion can be found in either Grimm et al. or Falls to support the Examiner's combination. Accordingly, the combination is improper.

For instance, nowhere in Grimm et al. was it suggested or taught that the broad range of water-miscible organic solvents disclosed and claimed in the present invention could be used. Also and particularly, the amount of ammonium bifluoride required in Grimm et al.'s etching composition (about 18% w/w) is roughly twice the highest amount of fluorides taught by the present invention (1-10% w/v). No where in Grimm et al. was it suggested that an etching composition comprising water, water miscible organic solvents and the comparatively low amount of fluoride of the present invention could successfully be used. In fact, Grimm et al. would suggest that ferric chloride must be used as part of the etching composition comprising low amounts of fluorides.

In addition to the foregoing, and for at least the fact that Falls' hydrofluoric acid based etching composition teaching the use of fluorides ranging from 10.1 to 50 w/w% (See Falls column 3, lines 12-28) and Grimm et al.'s etching composition teaching the use of about 18 w/w% fluoride, cannot be combined to teach or suggest the use of 1-10 w/v% fluorides of the present invention, Applicant asserts that this ground for rejection does not apply and respectfully requests its withdrawal.

Furthermore, claims 18 and 21 depend from claims 16 or 17 and are therefore patentable over Falls and Grimm et al. Claim 28 is now canceled and its rejection is moot. The limitations of claims 16 and 17 have also been incorporated into claim 27 making it patentable over Falls and Grimm et al. Additionally, claims 29-30 and 38, all of which depend from claim 27 are also patentable over Falls and Grimm et al. Applicant respectfully requests withdrawal of this ground for rejection.

With respect to the observations made by the Examiner in paragraphs 5, 6 and 7 of the office action relating to the use of a dye, the masking of the glass, the brushing or applying the etching composition from a tube, Applicant asserts that those objections are now moot in view of the foregoing.

Claim 20 is rejected under 35 U.S.C. § 103(a) as being patentable over Falls in view of Rhodenbaugh (US 4,921,626). The Examiner asserts that Falls did not teach the use of citric, acetic or phosphoric acid and a buffer for adjusting the pH of the etching composition whereas Rhodenbaugh cures that deficiency in the combined art "because Rhodenbaugh taught that controlled release of hydrofluoric acid would be possible." Applicant disagrees.

Claim 20 depends from amended claims 16 or 17, which do not teach the use of hydrofluoric acid in the etching composition. Not only is Falls deficient in view of the present invention by requiring the use of hydrofluoric acid, Rhodenbaugh does not cure that deficiency and in fact, teaches the controlled release of hydrofluoric acid in the etching composition. As disclosed, the non-use of hydrofluoric acid is one of the objects of the present invention. To that extent, the combined teachings of Falls and Rhodenbaugh neither teach nor suggest the present invention in as much as claim 20 depends from claims 16 or 17. As such, Applicant respectfully requests the withdrawal of this ground for rejection.

Claims 17, 25, 27-30 and 38 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Falls in view of Hogan (US 4,781,792). According to the Examiner, Falls does not teach a gelling agent and said deficiency is cured by Hogan's teaching of polyvinyl alcohol or polyvinyl pyrrolidene to glass etchants as a thickener. Applicant disagrees.

As mentioned above, claim 17 does not embody Fall's limitation with respect to the use of hydrofluoric acid. Claims 25 and 28 are canceled. Claims 27, 29, 30 and 38 embody the limitations of claim 17. Fall's hydrofluoric acid – requiring deficiency with respect to these claims are not cured by Hogan. Moreover, Hogan's teaching of polyvinyl alcohol or polyvinyl pyrrolidene as thickeners does not render obvious, the use of the cellulose derivatives of the present invention as gelling agents. Since the combined teachings of Falls and Hogan do not result in the inventions of claims 17, 27, 29, 30 and 38, Applicant respectfully requests the withdrawal of this ground for rejection.

Claims 19, 26, 34 and 35-37 are rejected under 35 U.S.C. §103(a) as being unpatentable over Falls in view of Dillarstone et al. (US 4,171,623). According to the Examiner, Falls did not teach using a surfactant and said deficiency is cured by Dillarstone et al., which teach using anionic and non-ionic surfactants in hydrofluoric acid compositions.

As mentioned above, in relation to the present invention, Falls has the additional deficiency of requiring the use of hydrofluoric acid. Dillarstone et al. also embody that deficiency by requiring the use of hydrofluoric acid as well. For that at least, the combined teachings of Falls and Dillarstone et al. cannot be used to arrive at the inventions of claim 16 or 17 from which claim 19 depends. The discussion of further limitations of claim 19 with respect to the use or non-use of surfactants is now moot. As such, the rejection of claim 19 should be withdrawn. Claims 26, 34, 35-37 are canceled and their rejection is moot as well.


CONCLUSION

In view of the foregoing remarks and the Inventor's Declaration submitted herewith, Applicant submits that there is no basis for applying the previous rejections to the pending claims and withdrawal of the rejections is respectfully requested. The claims are believed to be in condition for allowance, and Applicant earnestly solicits from the Examiner early notification of allowability.

Should the Examiner have any questions or believe a personal or telephonic interview may be in order, he is invited to contact the undersigned at his earliest convenience.

Respectfully submitted,

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